MOCK BISHOP'S WEED IN THE NEW WORLD TROPICS: RANGE EXTENSIONS FOR PTILIMNIUM CAPILLACEUM (UMBELLIFERAE)

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In the course of general collecting in Puerto Rico in the late summer of 1967 I chanced to stop at a roadside site which had a weed flora reminiscent of the southern Coastal Plain of the United States. Route 15 winds south from Cayey in the eastern third of the island until within a few kilometers it crosses the main east-west divide of the island at about 2,000 feet (600 m) elevation. At this point it offers a splendid view of the Atlantic Ocean to the north; and but for the fact that it is enclosed to some extent by bluffs at this point, it would offer a view of the Caribbean Sea to the south as well. *Solanum americanum* Mill., *Verbena bonariensis* L., *Chenopodium ambrosioides* L., *Sida rhombifolia* L., *Borreria laevis* (Lam.) Griseb., *Lycopersicon esculentum* Mill., *Salvia coccinea* Juss., *Rumex crispus* L., *Stachytarpheta jamaicensis* Vahl, *Leonurus sibiricus* L., *Pilea parietaria* (L.) Blume, *Plantago major* L., and a species of *Hypoxis* all testify to the "weediness" of the site, yet while there was cultivated land nearby, there were no signs of human habitation for several hundred yards. Those familiar with the species would say that this is just the sort of place that *Ptilimnium capillaceum* (Michx.) Raf. might be found. The few plants I found were in very bad shape, and the herbarium sheets they made are far from attractive. Nevertheless, there were quite a number of plants, indicating at least a second generation on Puerto Rican soil. This collection (*D'Arcy* 1896) documenting this range extension for the species is deposited at MO and FLAS. Leon (1957) listed it for Cuba but it has not been reported elsewhere in the Antilles.

In the course of checking the identity of the above collection, I came across a herbarium sheet of the same spe-

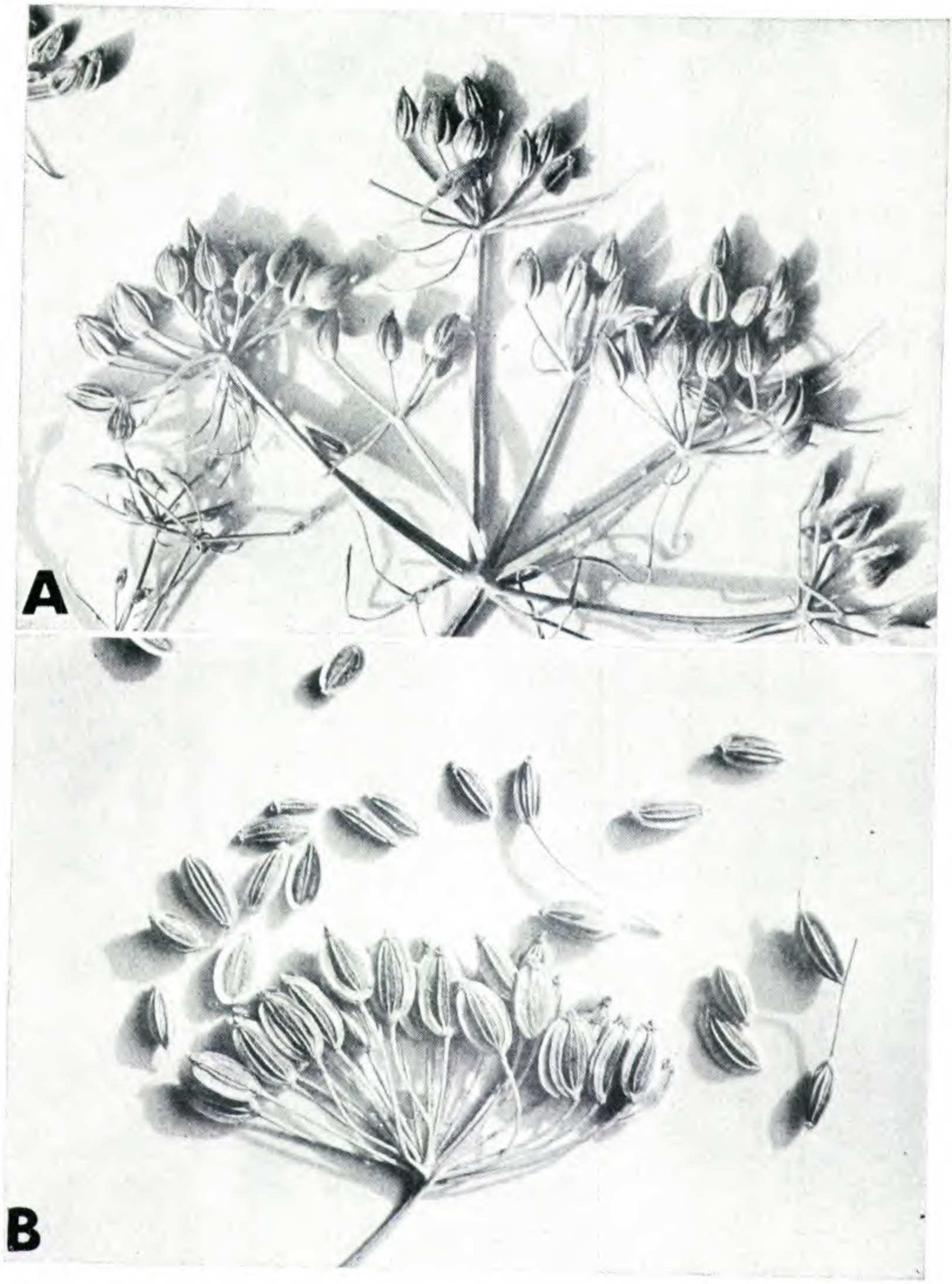

Plate 1. A. Fruits of *Ptilimnium capillaceum* (Michx.) Raf.
B. Fruits of *Anethum graveolens* L.

cies collected in 1967 by Dr. John Dwyer and Sister Mary Victoria Hayden in Panama. Their collection, number 7634, was taken "1.5 miles from Boquete on highway toward David, Chiriquí Province." This specimen, deposited at MO, represents a "first" for the genus in Central America. Dr. William Burger kindly informed me that there are no specimens of *Ptilimnium* among the new large holdings of Central American plants at the Field Museum of Natural History, Chicago.

Finding a number of instances where this species has been confused with *Anethum graveolens* L., "dill," "eneldo," "hinojo," "aneto," or "anisillo," which is sporadically cultivated in the West Indies and Central America has prompted Plate 1 which compares seeds of the two entities. Both Gray's Manual (Fernald, 1950) and Leon (1957) separate them mainly on the fact that *Ptilimniums* have white flowers and *Anethums* have yellow flowers, but this is not always helpful for fruiting material. Not only are the fruits of *Ptilimnium* smaller and plumper, but when the fruit splits in two, the carpophore or central axis usually remains as a distinct peg at the end of the fruit stalk, while in *Anethum* the carpophore splits into two ribs which are sunken in the seed surface and it falls as parts of the two seeds. Also, the seed of *Anethum* is flattened in the direction of the split in the fruit (dorsally compressed) while that of *Ptilimnium* has considerable depth away from the axis of splitting (laterally or not compressed).

The genus *Ptilimnium*, or Mock-Bishop's-weed, includes five other species and was hitherto restricted to the southeastern United States from Massachusetts to Kansas and Texas and south to Florida plus the Leon report for western Cuba. The genus was treated in some detail by Easterly (1957).

In addition to the *Ptilimnium*, the collections of 1967 included several other items worth mentioning. *Oxalis barrelieri* L. was picked up (*D'Arcy* 1720, 1756 FLAS) at two locations on the south side of the island, and Mr. Roy Wood-

bury, who assisted greatly in collecting and in locating my specific "wants" mentioned that it may be becoming common. *Passiflora edulis* Sims (*D'Arcy* 1762 MO) was taken just north of Lake Loiza, and *Verbesina encelioides* Benth. & Hook. (*D'Arcy* 2176 MO), reported as rare by Britton & Wilson (1926), was found to be a very plentiful and conspicuous wildflower throughout the hamlet of La Plena, a dry part of the southern interior of Puerto Rico west of Carmen.

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